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July 30, 2015

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Washington, D.C. 20460

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U.S. EPA Region V
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Chief, Environmental Enforcement Section
Environment and Natural Resources Div.
U.S. Department of Justice
Box 7611 Ben Franklin Station
Washington, D. C. 20044-7611
Re: DOJ No. 90-5-2-1-09608

Puerto Rico Environmental Quality Board
Pedro Nieves Miranda, Chairman
Attn: Luis R Sierra Torres,
Manager Air Quality
PO BOX 11488
San Juan, PR 00910

Chief, Air Compliance Branch
USEPA Region 2
290 Broadway – 21st Floor
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Jesse Adkins, Assistant Director
Compliance and Enforcement Section
West Virginia Division of Air Quality
601 57th Steet SE
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Indiana Department of Environmental Mangement
Office of Air Quality
Chief, Air Compliance and Enforcement Branch
100 N. Senate Avenue
Mail Code 61-53 IGCN 1003
Indianapolis, IN 46204-2251

Re: Essroc Cement Company – Consent Decree
Civil Aciton No. 2:11-cv-650-DSC
Semi-Annual Report

To Whom It May Concern:

Enclosed is Essroc's Semi-Annual report fro the period of January 1 to June 30, 2015. Please telephone me or Philp J Schworer (859) 817-5903, if you have any questions.

Very truly yours,

Derek Nicholls
Senior Vice President – Technical Director

ESSROC CEMENT CORP

CONSENT DECREE

SEMI-ANNUAL REPORT

July, 2015

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I. Introduction

The Consent Decree between Essroc, U.S. EPA and Affected States (effective on February 16, 2012) calls for Essroc Cement Corp ("Essroc") to submit Semi-Annual Reports (due on January 30 and July 30) to EPA and the Affected States for three years. Thereafter, Essroc is to submit an Annual Report (due on January 30) to EPA and the Affected States. The report must include the following information:

a. Identify any and all dates on which Essroc has installed, or describe the progress of installation of, each Control Technology required for each Kiln under Section VI (NO_x Control Technology, Emission Limits, and Monitoring Requirements) and Section VII (SO_2 Control Technology, Emission Limits, and Monitoring Requirements), and describe any problems encountered or anticipated during such installation, together with implemented or proposed solutions;

b. Identify any and all dates on which Essroc has completed installation of, or describe the progress of installation of, each CEMS required under Section VI.B (NO_x Continuous Emission Monitoring Systems) and Section VII.B (SO_2 Continuous Emission Monitoring Systems), and describe any problems encountered or anticipated during such installation, together with implemented or proposed solutions;

c. Identify any and all dates on which Essroc Retired the Bessemer Kilns;

d. Provide all CEMS data collected for each Kiln, including an explanation of any periods of CEMS downtime together with any missing data for which Essroc applied missing data substitution procedures, under Section VI.B (NO_x Continuous Emission Monitoring Systems) and Section VII.B (SO_2 Continuous Emission Monitoring Systems);

e. Demonstrate compliance with all applicable 30- Day Rolling Average Emission Limits in Section VI (NO_x Control Technology, Emission Limits, and Monitoring Requirements) and Section VII (SO_2 Control Technology, Emission Limits, and Monitoring Requirements) of this Consent Decree;

f. Provide a complete description and status of all actions Essroc has undertaken to comply with the Appendix of this Consent Decree;

g. Demonstrate compliance with any applicable 30-Day Rolling Average Emission Limits established under Appendix A or B of this Consent Decree;

h. If applicable, describe the status of actions undertaken pursuant to Section IX (Prohibition on Netting Credits or Offsets from Required Controls) of this Consent Decree;

i. Describe the status of permit applications and any proposed SIP revisions required under this Consent Decree;

j. Describe the status of any operation and maintenance work relating to activities required under this Consent Decree;

Information regarding the Mitigation Projects; and

Description of any non-compliance with the requirements of this Consent Decree and an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation.

(Consent Decree, Paragraph 49).

The remainder of this report provides the necessary information for each of the Essroc kiln's identified in the Consent Decree: Bessemer Kiln 4, Bessemer Kiln 5, Martinsburg Kiln 1, Logansport Kiln 1, Logansport Kiln 2, Speed Kiln 1, Speed Kiln 2, Nazareth Kiln 1, and San Juan Kiln 3.

Note, Essroc previously reported that Bessemer Kiln 4 and Kiln 5 were retired in April 2009. Consequently, all Consent Decree activities have been completed for Bessemer Kiln 4 and Kiln 5. No reporting on Bessemer Kiln 4 and Kiln 5 is required by the Consent Decree in this or subsequent semi-annual reports.

II Kiln Specific Information Required by Paragraph 49 of the Consent Decree

A) Martinsburg Kiln 1

Requirements:

NOx: Achieve a 30-Day Rolling Average emission limit of 2.15 lb/ton of clinker using SNCR by December 31, 2012.

SO_2: Install Dry Scrubber technology and have in Continuous Operation by December 31, 2012. Then, determine 30-Day Rolling Average emission limit by Test & Set procedures (Appendix A), to be no higher than 1.50 lb/ton of clinker.

Status:

Paragraph 49 Reporting Requirements	Essroc's Status Report
a) Identify any and all dates on which Essroc has installed, or describe the progress of installation of, each Control Technology required for each Kiln under Section VI (NO_x Control Technology, Emission Limits, and Monitoring Requirements) and Section VII (SO_2 Control Technology, Emission Limits, and Monitoring Requirements), and describe any problems encountered or anticipated during such installation, together with implemented or proposed solutions.	NOx: Essroc achieved continuous operation of the SNCR prior to December 31, 2012. CEMS data provided in Attachment A documents that the 30-Day Rolling average emissions of NOx is less than the agreed-upon limit of 2.15 lb/ton of clinker. SO_2: Essroc achieved continuous operation of the Dry Scrubber prior to December 31, 2012. CEMS data provided in Attachment A document that the 30-Day Rolling average emissions of SO_2 is less than 1.50 lb/ton of clinker. Optimization was completed in 2013. EPA and West Virginia approved the Optimization Report and the 30-Day Rolling Average emission limit of 1.50 lb/ton of clinker on September 17, 2013. Essroc sought and received authorization to conduct tests using dry lime injection instead of the current semi-dry technology for SO_2 control. The testing occurred over the period May 14 to 17, 2014. Essroc is currently evaluating the results of the tests and will submit a report to EPA summarizing the results and justification for requested modification(s)

Paragraph 49 Reporting Requirements	Essroc's Status Report
	of the approved system, if any.
b) Identify any and all dates on which Essroc has completed installation of, or describe the progress of installation of, each **CEMS** required under Section VI.B (NO_x Continuous Emission Monitoring Systems) and Section VII.B (SO_2 Continuous Emission Monitoring Systems), and describe any problems encountered or anticipated during such installation, together with implemented or proposed solutions.	CEMS installation was completed prior to the Effective Date of the Consent Decree. Essroc installed a data management system for the CEMS. The system manufactured by VIM Technology uses the CEMLink 6 program. The new system has been running in parallel with the existing system, the PF Sistemi (Italian) system. Parallel data collection will confirm proper operation of the new system. Essroc continues to run both systems in parallel while the new system continues to be evaluated and verified. Having the system in parallel has helped to resolve some issues with the programing part of CEMLink 6. We are continuing to run both systems to make sure that they are accurate. On May 4th of 2015 Essroc submitted a follow up investigation report to a malfunction in the facility that left the CEMS out of service. During that period, data substitution procedures were followed and the incident was fully reported as per requirements detailed in the Consent Decree.
c) Identify any and all dates on which Essroc retired the Bessemer Kilns.	Not applicable
d) Provide all CEMS data collected for each Kiln, including an explanation of any periods of CEMS downtime together with any missing data for which Essroc applied missing data substitution procedures, under Section VI.B (NO_x Continuous Emission Monitoring Systems) and Section VII.B (SO_2 Continuous Emission Monitoring Systems).	CEMS data is provided as Attachment A.
e) Demonstrate compliance with all applicable 30- Day Rolling Average Emission Limits in Section VI (NO_x Control Technology,	NOx: As documented by the CEMS data provided in Attachment A, the 30-Day rolling average emission rate for this reporting period

Paragraph 49 Reporting Requirements	Essroc's Status Report
Emission Limits, and Monitoring Requirements) and Section VII (SO_2 Control Technology, Emission Limits, and Monitoring Requirements) of this Consent Decree. NOx Control Technology Requirement: Achieve a 30-Day Rolling Average emission limit of 2.15 lb/ton of clinker using SNCR by December 31, 2012. SO_2 Control Technology Requirement: Install Dry Scrubber technology and Continuously Operate by December 31, 2012. Determine emission limit by Test & Set (Appendix A), to be no higher than 1.50 lb/ton of clinker.	was below 2.15 lb/ton of clinker. SO_2: As documented by the CEMS data provided in Attachment A, the 30-Day rolling average emission rate for this reporting was below 1.50 lb/ton.
f) Provide a complete description and status of all actions Essroc has undertaken to comply with the Appendix of this Consent Decree. Appendix A: Test & Set for SO_2: Baseline Data Collection Baseline Data Report: Submit Baseline Data Report (within **45 days** of completing the Baseline Data Collection)(App A, Para 7) Optimization Protocol Submit Optimization Protocol to EPA by at least **9/30/12** for approval. (Not less than 90 days prior to the commencement of optimization) (requirements for the protocol are found in App A, Para 11). Continuous Operation: by December 31, 2012. Optimization Period: Conduct in accordance with the Optimization Protocol. Shall last no longer than 150 operating days.	Optimization Protocol: Approved by EPA prior to conduction tests. Continuous Operation was achieved prior to the December 31, 2012 deadline. Optimization Period: Optimization, using the approved Optimization Protocol has been implemented. Optimization Report: The Optimization Report was submitted to EPA and the West Virginia on July 17, 2013. EPA and West Virginia approved the Optimization Report on September 17, 2013 Demonstration Period: Essroc commenced the Demonstration Period on September 25, 2013. Demonstration Report: The first report for the operations between September 25, 2013 and December 31, 2013 was submitted with the January 2014 Semi Annual report. The second

Paragraph 49 Reporting Requirements	Essroc's Status Report
Optimization Report : Submit a report to EPA within 30 days following completion of the Optimization Period. Demonstration Period : To commence 7 days after Essroc receives EPA's approval of the final Optimization Report. Demonstration shall last 300 Operating Days. Periodic report to EPA every 3 months. Demonstration Report : To be submitted within 60 days of completing the Demonstration Period. Report must propose the 30-Day Rolling Average Emission Limit. EPA can approve the proposed limit or can establish an alternative limit. Essroc can invoke Dispute Resolution if it disagrees with the alternative limit, see Para 74 of the Consent Decree. Appendix B: Not applicable Appendix C: Mitigation Projects:	report for the operations between January 1 and March 31, 2014 was submitted to EPA on May 20, 2014. The third report for the operations between April 1 and June 30, 2013 was submitted with the previous semi-annual report . The Demonstration Period is authorized to last 300 Operating Days. Essroc estimates that the Demonstration Period concluded on September 3, 2014. Essroc submitted the Demonstration Report to EPA on or about November 18, 2014. Essroc received a letter from EPA advising that the Demonstration Period Report was accepted and documented that the emission limit was now in effect for the facility. Appendix B: Not applicable Appendix C: Essroc completed the mitigation projects for the Martinsburg kiln as reported in the January 2014 semi annual report.
g) Demonstrate compliance with any applicable 30-Day Rolling Average Emission Limits established under Appendix A or B of this Consent Decree	As documented by the CEMS data provided in Attachment A, the 30-Day rolling average NOx emission rate is below 2.15 lb/ton of clinker. The 30-Day rolling average SO_2 emission rate is below 1.5 lbs/ton of clinker as documented in Attachment A
h) If applicable, describe the status of actions undertaken pursuant to Section IX (Prohibition on Netting Credits or Offsets from Required Controls) of this Consent Decree	Not applicable

Paragraph 49 Reporting Requirements	Essroc's Status Report
i) Describe the status of permit applications and any proposed SIP revisions required under this Consent Decree	Essroc submitted application for a Class II Administrative Update permit on April 8, 2014. The modified permit was effective on October 31, 2014.
j) Describe the status of any operation and maintenance work relating to activities required under this Consent Decree	Not applicable
Description of any non-compliance with the requirements of this Consent Decree and an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation.	Not applicable

B) Logansport Kiln 1

Requirements:

NOx: Conduct an SCR Pilot Study (to run a minimum of 4 months) in accordance with Appendix B. Submit the SCR Pilot Report by July 31, 2013 with results of the SCR Pilot Study. Following approval by U.S. EPA: if SCR works, install a full-scale system by September 30, 2014, continuously operate by December 31, 2014, and conduct an SCR Demonstration Period to establish an emission limit by the Test & Set procedures found in Appendix B; if SCR does not work, install SNCR and propose a Test & Set limit under Appendix A that is no less stringent than 7.00 lb/ton of clinker by December 31, 2014.

SO_2: Achieve emission limit of 3.50 lb/ton of clinker using a Dry Scrubber by December 31, 2013.

Status:

Paragraph 49 Reporting Requirements	Essroc's Status Report
a. Identify any and all dates on which Essroc has installed, or describe the progress of installation of, each **Control Technology** required for each Kiln under Section VI (NO_x Control Technology, Emission Limits, and Monitoring Requirements) and Section VII (SO_2 Control Technology, Emission Limits, and Monitoring Requirements), and describe any problems encountered or anticipated during such installation, together with implemented or proposed solutions.	NOx: In process, see below regarding status of the SCR Pilot Study. SO2: The Dry Scrubber was installed on December 26, 2013.
b. Identify any and all dates on which Essroc has completed installation of, or describe the progress of installation of, each **CEMS** required under Section VI.B (NO_x Continuous Emission Monitoring Systems) and Section VII.B (SO_2 Continuous Emission Monitoring Systems), and describe any problems encountered or anticipated during such installation, together with implemented or proposed solutions.	CEMS installation was completed prior to the Effective Date of the Consent Decree. CEMS data is provided as Attachment B.
c. Identify any and all dates on which Essroc Retired the Bessemer Kilns	Not applicable.

Paragraph 49 Reporting Requirements	Essroc's Status Report
d. Provide all CEMS data collected for each Kiln, including an explanation of any periods of CEMS downtime together with any missing data for which Essroc applied missing data substitution procedures, under Section VI.B (NO_x Continuous Emission Monitoring Systems) and Section VII.B (SO_2 Continuous Emission Monitoring Systems).	See attached.
e. Demonstrate compliance with all applicable 30- Day Rolling Average Emission Limits in Section VI (NO_x Control Technology, Emission Limits, and Monitoring Requirements) and Section VII (SO_2 Control Technology, Emission Limits, and Monitoring Requirements) of this Consent Decree.	In process, see below regarding status.
f. Provide a complete description and status of all actions Essroc has undertaken to comply with the Appendix of this Consent Decree Appendix A: Applicable only if SNCR is used because the SCR Pilot Study was deemed not successful. Appendix B: for SCR pilot study and potential full-scale demonstration. SCR Pilot Study: Essroc will design a study in accordance with the Pilot Study requirements found in Appendix B. The pilot scale SCR shall operate for a minimum of 4 months. SCR Pilot Study Report: Shall contain all of the information identified in Appendix B and be submitted to EPA by July 31, 2013. Continuous Operation: If EPA approves the Pilot Study Report and SCR is feasible, Essroc will install and continuously operate SCR by September 30, 2014. If EPA concurs that SCR is not feasible, Essroc will install and continuously operate SNCR by September 30, 2014.	Appendix A: Not applicable until SCR is determined to be unworkable. Appendix B: The SCR Pilot Study equipment was delivered to the site in January 2013. The SCR Pilot study was conducted between January and July 2013. The SCR Pilot Study Report was submitted to EPA and IDEM prior to the July 31, 2013 agreed date. Essroc concluded that the SCR Pilot Study was not successful and that SCR technology is not a feasible alternative for the Logansport kilns. EPA disapproved the SCR Pilot Study Report. Essroc invoked informal dispute resolution provided for by the Consent Decree. Essroc and EPA participated in informal dispute resolution, but were unable to come to agreement. Essroc invoked formal dispute resolution on May 16, 2014. By agreement of the parties,

Paragraph 49 Reporting Requirements	Essroc's Status Report
SCR Demonstration Period: shall commence by December 31, 2014, span at least 140 operating days, and satisfy the requirements of Appendix B. SCR Demonstration Report: To identify a proposed 40-Day Rolling Average Emission Limit for NOx. SNCR Install: If SNCR is installed, Essroc shall propose a 30-Day Rolling Average Emission Limit for NOx by December 31, 2014. Appendix C: Not applicable.	EPA's response will be provided to Essroc on August 4, 2014. If the dispute is not resolved, the Consent Decree provides that Essroc shall file a motion with the federal court. The September 30, 2014 date was not met for installation of SCR or SNCR. The date is predicated on EPA's approval of the SCR Pilot Study report. As discussed above, EPA has disapproved the SCR Pilot Study report and Essroc has invoked formal dispute resolution. Essroc and EPA have continued in settlement discussion prior to filing a motion with the federal court.
g. Demonstrate compliance with any applicable 30-Day Rolling Average Emission Limits established under Appendix A or B of this Consent Decree.	In process.
h. If applicable, describe the status of actions undertaken pursuant to Section IX (Prohibition on Netting Credits or Offsets from Required Controls) of this Consent Decree.	Not applicable.
i. Describe the status of permit applications and any proposed SIP revisions required under this Consent Decree. • Application to include the Dry Scrubber and SO_2 emission limit in the Title V permit must be filed on or before December 31, 2014 (one year after the control technology is installed). • Application to include the NOx control technology will occur up to one year follow installation, optimization and demonstration of the control	On December 29, 2014, the facility submitted an application to modify the air permit to include the SO2 emission limit for Kiln #1.

Paragraph 49 Reporting Requirements	Essroc's Status Report
technology.	
j. Describe the status of any operation and maintenance work relating to activities required under this Consent Decree.	Not applicable at this time.
Description of any non-compliance with the requirements of this Consent Decree and an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation.	Not applicable.

C) Logansport Kiln 2

Kiln was restarted on February 26, 2013. Notice of restart was provided to EPA and IDEM on March 19, 2013.

Requirements:

NOx: If SCR is installed on Logansport Kiln 1, Essroc shall install SCR on Logansport Kiln 2 by September 30, 2015. Emission limit to be established by Test & Set. If SNCR is installed on Logansport Kiln 1, Essroc shall install SNCR jon Logansport Kiln 2 by September 30, 2015. Emission limit to be established by Test & Set, and must be below 7.00 lb/ton of clinker.

SO_2: Achieve emission limit of 4.80 lb/ton of clinker using a Dry Scrubber by December 31, 2014.

Status:

Paragraph 49 Reporting Requirements	Essroc's Status Report
a. Identify any and all dates on which Essroc has installed, or describe the progress of installation of, each Control Technology required for each Kiln under Section VI (NO_x Control Technology, Emission Limits, and Monitoring Requirements) and Section VII (SO_2 Control Technology, Emission Limits, and Monitoring Requirements), and describe any problems encountered or anticipated during such installation, together with implemented or proposed solutions.	NOx: Direction will depend upon the results of the SCR Pilot Study that was conducted on Logansport Kiln 1. SO2: The facility achieved installation and operation of Dry Scrubber by December 31, 2014.
b. Identify any and all dates on which Essroc has completed installation of, or describe the progress of installation of, each CEMS required under Section VI.B (NO_x Continuous Emission Monitoring Systems) and Section VII.B (SO_2 Continuous Emission Monitoring Systems), and describe any problems encountered or anticipated during such installation, together with implemented or proposed solutions.	CEMS installation was completed prior to the Effective Date of the Consent Decree. CEMS data is provided as Attachment C.
c. Identify any and all dates on which Essroc Retired the Bessemer Kilns.	Not applicable.

Paragraph 49 Reporting Requirements	Essroc's Status Report
d. Provide all CEMS data collected for each Kiln, including an explanation of any periods of CEMS downtime together with any missing data for which Essroc applied missing data substitution procedures, under Section VI.B (NO_x Continuous Emission Monitoring Systems) and Section VII.B (SO_2 Continuous Emission Monitoring Systems).	CEMS data provided as Attachment C.
e. Demonstrate compliance with all applicable 30- Day Rolling Average Emission Limits in Section VI (NO_x Control Technology, Emission Limits, and Monitoring Requirements) and Section VII (SO_2 Control Technology, Emission Limits, and Monitoring Requirements) of this Consent Decree.	Not applicable at this time.
f. Provide a complete description and status of all actions Essroc has undertaken to comply with the Appendix of this Consent Decree. Appendix A: If applicable, install SNCR by September 30, 2015. (Applicable if SNCR is used because the SCR was deemed not successful during the Kiln 1 SCR Pilot Study.) Propose a 30-Day Rolling Average Emission Limit by December 31, 2015. Appendix B: If feasible, install and Continuously Operate SCR by September 30, 2015. Conduct Demonstration Period and propose a 30-Day Rolling Average Emission Limit by May 31, 2016. Appendix C: Not applicable.	Installation of SCR or SNCR will depend upon the resolution of the formal dispute.
g. Demonstrate compliance with any applicable 30-Day Rolling Average Emission Limits established under Appendix A or B of this Consent Decree.	Not applicable at this time.
h. If applicable, describe the status of actions undertaken pursuant to Section IX (Prohibition on Netting Credits or Offsets from Required	Not applicable.

Paragraph 49 Reporting Requirements	Essroc's Status Report
Controls) of this Consent Decree.	
i. Describe the status of permit applications and any proposed SIP revisions required under this Consent Decree. • Application to include the Dry Scrubber and SO_2 emission limit in the Title V permit must be filed on or before December 31, 2015 (one year after the control technology is installed). • Application to include the NOx control technology will follow up to one year following installation, optimization and demonstration of the control technology.	To be completed at a future date.
j. Describe the status of any operation and maintenance work relating to activities required under this Consent Decree.	Not applicable.
Information regarding the Mitigation Projects.	Not applicable.
Description of any non-compliance with the requirements of this Consent Decree and an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation.	Not applicable.

D) Speed Kiln 1

This kiln went into Temporary Cessation on February 16, 2012. Essroc briefly operated the kiln in June and July 2013 and then returned the kiln to Temporary Cessation status. If the kiln is restarted after December 31, 2013, it will be restarted with SNCR and Dry Scrubber technology. The kiln was not operated over the period July 1 through December 31, 2014. The kiln restarted on May 21, 2015 and is scheduled to operate regulatory for the rest of 2015.

Requirements:

NOx: Achieve a 30-Day Rolling Average emission limit of 3.50 lb/ton of clinker using SNCR by December 31, 2013.

SO_2: Achieve a 30-Day Rolling Average emission limit of 1.00 lb/ton of clinker (including the alkali bypass) using a Dry Scrubber by December 31, 2013.

Status:

Paragraph 49 Reporting Requirements	Essroc's Status Report
a. Identify any and all dates on which Essroc has installed, or describe the progress of installation of, each **Control Technology** required for each Kiln under Section VI (NO_x Control Technology, Emission Limits, and Monitoring Requirements) and Section VII (SO_2 Control Technology, Emission Limits, and Monitoring Requirements), and describe any problems encountered or anticipated during such installation, together with implemented or proposed solutions.	Essroc restarted operation on May 21, 2015. The SNCR and dry scrubber systems for NOx and SO2 control respectively, had been installed prior to the facility starting operation.
b. Identify any and all dates on which Essroc has completed installation of, or describe the progress of installation of, each **CEMS** required under Section VI.B (NO_x Continuous Emission Monitoring Systems) and Section VII.B (SO_2 Continuous Emission Monitoring Systems), and describe any problems encountered or anticipated during such installation, together with implemented or proposed solutions.	CEMS for NOx and SO2 had been previously installed and maintained in the facility before the deadlines described in the Consent Decree. These were part of the regulatory requirements of the facility.
c. Identify any and all dates on which Essroc	Not applicable.

Paragraph 49 Reporting Requirements	Essroc's Status Report
Retired the Bessemer Kilns.	
d. Provide all CEMS data collected for each Kiln, including an explanation of any periods of CEMS downtime together with any missing data for which Essroc applied missing data substitution procedures, under Section VI.B (NO_x Continuous Emission Monitoring Systems) and Section VII.B (SO_2 Continuous Emission Monitoring Systems).	Data is provided in Attachment D.
e. Demonstrate compliance with all applicable 30- Day Rolling Average Emission Limits in Section VI (NO_x Control Technology, Emission Limits, and Monitoring Requirements) and Section VII (SO_2 Control Technology, Emission Limits, and Monitoring Requirements) of this Consent Decree.	Data to demonstrate compliance with both 30-Day rolling averages for NOX and SO2 is provided in Attachment A.
f. Provide a complete description and status of all actions Essroc has undertaken to comply with the Appendix of this Consent Decree. Appendix A: Not applicable Appendix B: Not applicable Appendix C: Speed plant mitigation project:	 Appendix A: Not applicable Appendix B: Not applicable Appendix C: The Speed plant mitigation project was completed on or before December 31, 2012 as reported in previous semi-annual reports.
g. Demonstrate compliance with any applicable 30-Day Rolling Average Emission Limits established under Appendix A or B of this Consent Decree.	Not applicable.
h. If applicable, describe the status of actions undertaken pursuant to Section IX (Prohibition on Netting Credits or Offsets from Required Controls) of this Consent Decree.	Not applicable.
i. Describe the status of permit applications and any proposed SIP revisions required under this Consent Decree.	To be completed at a future date.

Paragraph 49 Reporting Requirements	Essroc's Status Report
Application to include the control technologies and emission limit will be submitted no more than one year following restart as discussed above.	
j. Describe the status of any operation and maintenance work relating to activities required under this Consent Decree.	Not applicable.
Description of any non-compliance with the requirements of this Consent Decree and an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation.	Not applicable.

E) Speed Kiln 2

Requirements:

NOx: Achieve a 30-Day Rolling Average emission limit of 2.10 lb/ton of clinker using SNCR by December 31, 2012.

SO_2 : Achieve emission limit no higher than 1.70 lb/ton of clinker (including the alkali bypass) using a Dry Scrubber by December 31, 2013.

Status:

Paragraph 49 Reporting Requirements	Essroc's Status Report
a. Identify any and all dates on which Essroc has installed, or describe the progress of installation of, each Control Technology required for each Kiln under Section VI (NO_x Control Technology, Emission Limits, and Monitoring Requirements) and Section VII (SO_2 Control Technology, Emission Limits, and Monitoring Requirements), and describe any problems encountered or anticipated during such installation, together with implemented or proposed solutions.	NOx: Essroc achieved continuous operation of the SNCR prior to December 31, 2012. CEMS data provided in Attachment E document that the 30-Day Rolling average emissions of NOx is less than the agreed-upon limit of 2.10 lb/ton of clinker. SO2: Construction of the Dry Scrubber was completed prior to December 31, 2013.
b. Identify any and all dates on which Essroc has completed installation of, or describe the progress of installation of, each CEMS required under Section VI.B (NO_x Continuous Emission Monitoring Systems) and Section VII.B (SO_2 Continuous Emission Monitoring Systems), and describe any problems encountered or anticipated during such installation, together with implemented or proposed solutions.	CEMS installation was completed prior to the Effective Date of the Consent Decree. CEMS data is provided as Attachment E.
c. Identify any and all dates on which Essroc Retired the Bessemer Kilns.	Not applicable.
d. Provide all CEMS data collected for each Kiln, including an explanation of any periods of CEMS downtime together with any missing data for which Essroc applied missing data substitution procedures, under Section VI.B (NO_x Continuous Emission Monitoring	See Attachment E for the CEMS data summary.

Paragraph 49 Reporting Requirements	Essroc's Status Report
Systems) and Section VII.B (SO_2 Continuous Emission Monitoring Systems).	
e. Demonstrate compliance with all applicable 30- Day Rolling Average Emission Limits in Section VI (NO_x Control Technology, Emission Limits, and Monitoring Requirements) and Section VII (SO_2 Control Technology, Emission Limits, and Monitoring Requirements) of this Consent Decree.	NOx: Compliance with the Emission Limit is demonstrated with the 30-day rolling average emission rate commencing on December 31, 2012. See Attachment E. SO2: Compliance with the Emission Limit is demonstrated with 30-day rolling average emission rate prior to December 31, 2013. See Attachment E.
f. Provide a complete description and status of all actions Essroc has undertaken to comply with the Appendix of this Consent Decree Appendix A: Not applicable. Appendix B: Not applicable. Appendix C: Speed mitigation project:	 Appendix A: Not applicable. Appendix B: Not applicable. Appendix C: The Speed mitigation project was completed on or before December 31, 2012 as reported in previous semi-annual reports.
g. Demonstrate compliance with any applicable 30-Day Rolling Average Emission Limits established under Appendix A or B of this Consent Decree.	Not applicable.
h. If applicable, describe the status of actions undertaken pursuant to Section IX (Prohibition on Netting Credits or Offsets from Required Controls) of this Consent Decree.	Not applicable.
i. Describe the status of permit applications and any proposed SIP revisions required under this Consent Decree.	Completed with issuance of permit modification by IDEM dated October 24, 2013.
j. Describe the status of any operation and maintenance work relating to activities required under this Consent Decree.	Not applicable.
Description of any non-compliance with the requirements of this Consent Decree and an explanation of the violation's likely cause and	Not applicable.

Paragraph 49 Reporting Requirements	Essroc's Status Report
of the remedial steps taken, or to be taken, to prevent or minimize such violation.	

F) Nazareth Kiln 1

Requirements:

NOx: Achieve a 30-Day Rolling Average emission limit of 2.30 lb/ton of clinker using SNCR by July 1, 2012.

SO_2: Achieve emission limit no higher than 1.80 lb/ton of clinker using a Dry Scrubber by December 31, 2014.

Status:

Paragraph 49 Reporting Requirements	Essroc's Status Report
a. Identify any and all dates on which Essroc has installed, or describe the progress of installation of, each Control Technology required for each Kiln under Section VI (NO_x Control Technology, Emission Limits, and Monitoring Requirements) and Section VII (SO_2 Control Technology, Emission Limits, and Monitoring Requirements), and describe any problems encountered or anticipated during such installation, together with implemented or proposed solutions.	NOx: SNCR was installed in May 2011, prior to the Effective Date of this Consent Decree. CEMS data provided as Attachment F document that the NOx emission rate is below the agreed-upon limit of 2.30 lb/ton of clinker. SO2: Construction of the Dry Scrubber was accomplished by the December 31, 2014 compliance date. The scrubber has been in continuous operation since that date.
b. Identify any and all dates on which Essroc has completed installation of, or describe the progress of installation of, each CEMS required under Section VI.B (NO_x Continuous Emission Monitoring Systems) and Section VII.B (SO_2 Continuous Emission Monitoring Systems), and describe any problems encountered or anticipated during such installation, together with implemented or proposed solutions.	CEMS installation was completed prior to the Effective Date of the Consent Decree. CEMS data are provided as Attachment F.
c. Identify any and all dates on which Essroc Retired the Bessemer Kilns.	Not applicable.
d. Provide all CEMS data collected for each Kiln, including an explanation of any periods of CEMS downtime together with any missing data for which Essroc applied missing data substitution procedures, under Section VI.B (NO_x Continuous Emission Monitoring	See Attachment F for the CEMS data.

Paragraph 49 Reporting Requirements	Essroc's Status Report
Systems) and Section VII.B (SO_2 Continuous Emission Monitoring Systems).	
e. Demonstrate compliance with all applicable 30- Day Rolling Average Emission Limits in Section VI (NO_x Control Technology, Emission Limits, and Monitoring Requirements) and Section VII (SO_2 Control Technology, Emission Limits, and Monitoring Requirements) of this Consent Decree.	Data provided in Attachment F demonstrates that the 30-day rolling average NOx Emission Rate is below 2.30 lb/ton of clinker limit. Calculation of the 30 day emission rate of SO2 commenced on January 1, 2015 and is included in AttachmentF.
f. Provide a complete description and status of all actions Essroc has undertaken to comply with the Appendix of this Consent Decree Appendix A: Not applicable. Appendix B: Not applicable. Appendix C: Nazareth mitigation project:	 Appendix A and B: Not applicable. Appendix C: The Nazareth mitigation project was completed on May 31, 2012 as reported in previous semi-annual reports.
g. Demonstrate compliance with any applicable 30-Day Rolling Average Emission Limits established under Appendix A or B of this Consent Decree.	Not applicable.
h. If applicable, describe the status of actions undertaken pursuant to Section IX (Prohibition on Netting Credits or Offsets from Required Controls) of this Consent Decree.	Not applicable.
i. Describe the status of permit applications and any proposed SIP revisions required under this Consent Decree.	Completed for the SNCR. To be completed for the Dry Scrubber on or before December 31, 2015 (one year after installation of the control device).
j. Describe the status of any operation and maintenance work relating to activities required under this Consent Decree.	Not applicable.
Description of any non-compliance with the requirements of this Consent Decree and an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to	Not applicable.

Paragraph 49 Reporting Requirements	Essroc's Status Report
prevent or minimize such violation.	

G) San Juan Kiln 3

Requirements:

NOx: Install SNCR by December 31, 2013. Emission limit to be established by Test & Set and shall be no higher than 2.30 lb/ton of clinker.

SO_2 :Achieve emission limit no higher than 1.00 lb/ton of clinker using a Dry Scrubber by December 31, 2013.

Status:

Paragraph 49 Reporting Requirements	Essroc's Status Report
a. Identify any and all dates on which Essroc has installed, or describe the progress of installation of, each **Control Technology** required for each Kiln under Section VI (NO_x Control Technology, Emission Limits, and Monitoring Requirements) and Section VII (SO_2 Control Technology, Emission Limits, and Monitoring Requirements), and describe any problems encountered or anticipated during such installation, together with implemented or proposed solutions.	On January 17, 2014, the kiln started with an SNCR and a Dry Scrubber.
b. Identify any and all dates on which Essroc has completed installation of, or describe the progress of installation of, each **CEMS** required under Section VI.B (NO_x Continuous Emission Monitoring Systems) and Section VII.B (SO_2 Continuous Emission Monitoring Systems), and describe any problems encountered or anticipated during such installation, together with implemented or proposed solutions.	CEMS installation was completed prior to the Effective Date of the Consent Decree. Attachment G provides the NOx and SO_2 CEMS data.
c. Identify any and all dates on which Essroc Retired the Bessemer Kilns.	Not applicable to San Juan.
d. Provide all CEMS data collected for each Kiln, including an explanation of any periods of CEMS downtime together with any missing data for which Essroc applied missing data substitution procedures, under Section VI.B (NO_x Continuous Emission Monitoring Systems) and Section VII.B (SO_2 Continuous	See Attachment G.

Paragraph 49 Reporting Requirements	Essroc's Status Report
Emission Monitoring Systems).	
e. Demonstrate compliance with all applicable 30- Day Rolling Average Emission Limits in Section VI (NO_x Control Technology, Emission Limits, and Monitoring Requirements) and Section VII (SO_2 Control Technology, Emission Limits, and Monitoring Requirements) of this Consent Decree.	In May 2014, Essroc upgraded the CEMS system to the CEMLink 6 program. Data reported in Attachment G underwent additional quality assurance checks by Essroc and its contractor, VIM to remove any bias created by the system upgrade. The evaluation found the following: -Kiln On Process Status: System status signals were being taken from fuel pump "run" status. The definition needed to be changed to include the fuel feed valve status so that no recirculation events would be taken to be Kiln as Kiln Operation. This was corrected. -Kiln Startup Process Status: Current Process Startup status had included a 60% kiln feed cutoff or a 120 minute feed elapsed time. The definition was amended to make sure that the predominant factors for Kiln Operation are Fuel feed and Kiln Feed. This was corrected. -Kiln On Status from SNCR: The system was retrieving a signal from the SNCR system process status. This led the system to believe that any time the SNCR status indicated operation a signal was red by the data acquisition system, indicating that the kiln was in operation. This was corrected. -Process Startup Emissions: When the new data acquisition and handling system was installed, previous data was imported from the old system. This imported data was not flagged correctly by the old system and appeared to indicate that the kiln was not in operation. The data was correctly flagged for periods of startup in accordance with our detailed records. -30 Day Rolling Average Calculation – It was found that the vendor had incorrectly defined the calculation for the 30 Day Rolling

Paragraph 49 Reporting Requirements	Essroc's Status Report
	Averages. A modification took place to include the ratio of the 30-day rolling sums from both clinker and each applicable pollutant so that the values would be correct. -NOx Data Substitution: The NO and NO2 had been manually placed as "offline" from 1/1/2014 to the installation of the data acquisition system. This did not allow the system to correctly substitute data for invalid hours during the first quarter of 2014. The substitution was flagged properly, thereby correcting the substitution logic. The data was therefore corrected. -Data Invalidation: It was found that the system had erroneously flagged as valid, data which was above the range of the instrumentation by many orders of magnitude. This data was corrected and an error in the logic which prevented the invalidation was also corrected. -H2O Data Substitution: The moisture concentration channel for data substitution had not been placed in the system, this was corrected to resolve for any invalid moisture concentration values in accordance with part 75. -MPC values: Maximum Potential Concentration (MPC) values for the data substitution logic were overestimated. After review of 40 CFR 75, Appendix A, requirements, the value for NOx MPC was derived from the maximum value of all the runs of a previous stack test during normal operation. The SO2 MPC was derived from the maximum value of the first and second quarters of the previous year. The selected values were entered into the data acquisition and handling system and a recalculation was achieved. This corrected the values as they are presented in Attachment G.

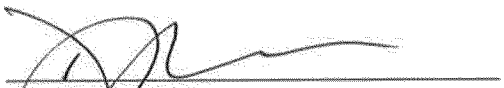
Paragraph 49 Reporting Requirements	Essroc's Status Report
	-SNCR Cascade Control: It was found that the control logic for the SNCR, was injecting ammonia into the system , but was not reaching the correct set point of the control logic, which was conservatively set at 2.10 lb/ton. Review of the control logic discovered that the programmer had not scaled one of the signals correctly. This was corrected and the automation loop functions properly.
f. Provide a complete description and status of all actions Essroc has undertaken to comply with the Appendix of this Consent Decree: Appendix A: Test & Set for NOx: Baseline Data Collection: Must start at least 180 days prior to start-up of equipment, unless other period approved by EPA. Baseline Data Collection must include full range of normal kiln operations including changes in raw mix chemistry due to differing clinker manufacture, changes in production levels. Collect data for **180 days**, or other time period if approved by EPA. Baseline Data Report: Submit Baseline Data Report (within **45 days** of completing the Baseline Data Collection)(App A, Para 7) Optimization Protocol: Submit Optimization Protocol to EPA by at least **9/30/13** for approval. (Not less than 90 days prior to the commencement of optimization) (requirements for the protocol are found in App A, Para 11). Continuous Operation: by December 31, 2013. Optimization Period: Conduct in accordance with the Optimization Protocol. Shall last no longer than 150 operating days. Optimization Report : Submit a report to EPA	Appendix A: Test & Set for NOx: Design Report: EPA and Puerto Rico EQB approved the Design Report on August 7, 2013. Baseline Data Report: Essroc submitted the Baseline Data Report on October 17, 2013. Optimization Protocol: Essroc submitted the Optimization Protocol to EPA on October 17, 2013. Continuous Operation: The SNCR went into shakedown period on January 17, 2014. The shakedown period will last no more than 90 Operating Days. The shakedown period concluded on May 19, 2014. Optimization Period: The first of the three molar ratio tests started on May 21, 2014 through May 31, 2014; after an operational shutdown, the test was re-implemented on July1 through 2 of 2014. The ammonia flowrate for the first test was calculated using the previously-determined baseline emission

Paragraph 49 Reporting Requirements	Essroc's Status Report
within 30 days following completion of the Optimization Period. Demonstration Period : To commence 7 days after Essroc receives EPA's approval of the final Optimization Report. Demonstration shall last 300 Operating Days. Periodic report to EPA every 3 months. Demonstration Report : To be submitted within 60 days of completing the Demonstration Period. Report must propose the 30-Day Rolling Average Emission Limit. EPA can approve the proposed limit or can establish an alternative limit. Essroc can invoke Dispute Resolution if it disagrees with the alternative limit, see Para 74 of the Consent Decree. Appendix B. Not applicable. Appendix C. Not applicable.	rate of 111 lbs NOx / hr. This equated to an ammonia injection rate of 21gallons/hr (0.35 gallons per minute). Ammonia was injected via one lance installed at the exit of the Calciner. The actual, uncontrolled NOx emission rate during the first test was calculated to be 99.5 lbs / hr. Thus, the actual molar ratio was calculated to be 0.75:1 for this first test. The additional testing ratios were 1:1 and 1.25:1. The ammonia injection rate for the additional molar ratios were 0.55 and 0.67 gallons per minute. The second testing cycle started on July 6 through 30 of 2014 and continued on September 8th after a schedule shutdown. The third testing cycle occurred during September 17 through 27 of 2014 and then continued after a scheduled shutdown on November 8th through 13th. Optimization Report: Current negotiations are underway to possibly establish nominal limits for the facility; no optimization period data would be required under this circumstance. Essroc will continue ongoing negotiations and will update accordingly on subsequent reports. Demonstration Period: : Current negotiations are underway to possibly establish nominal limits for the facility; no optimization period data would be required under this circumstance. Essroc will continue ongoing negotiations and will update accordingly on subsequent reports.

Paragraph 49 Reporting Requirements	Essroc's Status Report
	Demonstration Report: : Current negotiations are underway to possibly establish nominal limits for the facility; no optimization period data would be required under this circumstance. Essroc will continue ongoing negotiations and will update accordingly on subsequent reports.
g. Demonstrate compliance with any applicable 30-Day Rolling Average Emission Limits established under Appendix A or B of this Consent Decree.	Attachment G describes the 30-Day Rolling Average values calculated for SO2 and NOx.
h. If applicable, describe the status of actions undertaken pursuant to Section IX (Prohibition on Netting Credits or Offsets from Required Controls) of this Consent Decree.	Not applicable.
i. Describe the status of permit applications and any proposed SIP revisions required under this Consent Decree.	To be implemented at a future date.
j. Describe the status of any operation and maintenance work relating to activities required under this Consent Decree.	Not applicable.
Description of any non-compliance with the requirements of this Consent Decree and an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation.	Not applicable.

IV. Responsible Official Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



Derek Nicholls
Senior Vice President-Technical Direcotr
Essroc Cement Corp

ATTACHMENT A

MARTINSBURG KILN 1

FACILITY	Martinsburg	NOX Limit	SO2 Limit
KILN	1	2.15	1.50
DATE	CLINKER PRODUCTION	NOX 30DRA	SO2 30DRA
	TON/DAY	LB/TON-CK	LB/TON-CK
1/1/2015	3600	1.92	1.19
1/2/2015	4566	1.92	1.16
1/3/2015	1676	1.92	1.17
1/18/2015	0	1.93	1.16
1/19/2015	64	1.94	1.16
1/20/2015	2188	1.95	1.20
1/21/2015	3990	1.97	1.17
1/22/2015	4390	1.99	1.13
1/23/2015	4316	2.00	1.11
1/24/2015	4212	2.00	1.11
1/25/2015	4790	1.99	1.09
1/26/2015	4860	2.00	1.14
1/27/2015	4836	2.00	1.13
1/28/2015	4738	2.00	1.12
1/29/2015	4508	2.00	1.10
1/30/2015	4492	2.00	1.12
1/31/2015	3147	1.99	1.14
2/1/2015	4405	1.98	1.17
2/2/2015	4308	1.98	1.19
2/3/2015	4754	1.98	1.23
2/4/2015	4723	1.98	1.26
2/5/2015	4630	1.98	1.25
2/6/2015	4863	1.98	1.22
2/7/2015	4844	1.96	1.25
2/8/2015	4769	1.95	1.31
2/9/2015	4382	1.95	1.35
2/10/2015	4665	1.95	1.34
2/11/2015	4865	1.95	1.35
2/12/2015	4946	1.94	1.37
2/13/2015	4284	1.95	1.41
2/14/2015	4219	1.96	1.39
2/15/2015	2141	1.95	1.44
2/16/2015	919	1.96	1.44
2/17/2015	4218	1.95	1.41
2/18/2015	4444	1.94	1.40
2/19/2015	798	1.95	1.36
2/20/2015	675	1.96	1.40
2/21/2015	4384	1.95	1.42
2/22/2015	4383	1.94	1.48
2/23/2015	4502	1.94	1.46
2/24/2015	731	1.94	1.48
3/21/2015	0	1.94	1.42

3/22/2015	0	1.94	1.45
3/23/2015	49	1.95	1.48
3/24/2015	3723	1.97	1.48
3/25/2015	2546	1.96	1.46
3/27/2015	1447	1.97	1.46
3/28/2015	4106	1.97	1.43
3/29/2015	4611	1.97	1.43
3/30/2015	1139	1.98	1.41
3/31/2015	4343	1.98	1.41
4/1/2015	4829	1.98	1.39
4/2/2015	4881	1.97	1.38
4/3/2015	4880	1.97	1.31
4/4/2015	4900	1.98	1.25
4/5/2015	4893	1.98	1.19
4/6/2015	3720	1.97	1.18
4/7/2015	0	1.98	1.19
4/8/2015	4005	1.98	1.22
4/9/2015	5198	1.97	1.20
4/10/2015	5015	1.92	1.20
4/11/2015	5131	1.92	1.18
4/12/2015	4112	1.88	1.17
4/13/2015	5033	1.88	1.19
4/14/2015	5366	1.86	1.17
4/15/2015	5304	1.83	1.16
4/16/2015	5350	1.81	1.20
4/17/2015	5619	1.80	1.16
4/18/2015	4343	1.80	1.11
4/19/2015	4857	1.80	1.13
4/20/2015	4875	1.80	1.12
4/21/2015	4987	1.80	1.11
4/22/2015	4819	1.80	1.09
4/23/2015	4736	1.79	1.10
4/24/2015	4811	1.78	1.12
4/25/2015	4590	1.78	1.17
4/26/2015	4864	1.77	1.16
4/27/2015	4633	1.77	1.17
4/28/2015	5051	1.77	1.17
4/29/2015	1509	1.76	1.16
4/30/2015	3147	1.76	1.16
5/1/2015	4882	1.75	1.16
5/2/2015	5096	1.75	1.15
5/3/2015	5196	1.75	1.14
5/4/2015	5246	1.74	1.13
5/5/2015	5201	1.74	1.15
5/6/2015	5132	1.74	1.13
5/7/2015	3191	1.75	1.14
5/8/2015	5054	1.74	1.14

5/9/2015	5132	1.74	1.15
5/10/2015	4704	1.74	1.18
5/11/2015	3676	1.75	1.18
5/12/2015	5042	1.75	1.20
5/13/2015	5069	1.75	1.20
5/14/2015	4817	1.75	1.22
5/15/2015	4316	1.75	1.22
5/16/2015	2007	1.76	1.18
5/19/2015	0	1.76	1.21
5/20/2015	2849	1.76	1.23
5/21/2015	4924	1.76	1.23
5/22/2015	4769	1.76	1.24
5/23/2015	4917	1.76	1.25
5/24/2015	4968	1.76	1.27
5/25/2015	4912	1.76	1.24
5/26/2015	4802	1.76	1.23
5/27/2015	2056	1.75	1.20
5/28/2015	516	1.75	1.22
5/29/2015	4291	1.74	1.25
5/30/2015	4144	1.74	1.28
5/31/2015	2155	1.75	1.29
6/1/2015	393	1.74	1.30
6/5/2015	0	1.74	1.32
6/6/2015	4545	1.75	1.35
6/7/2015	4768	1.76	1.36
6/8/2015	3748	1.77	1.39
6/9/2015	3759	1.78	1.38
6/10/2015	4592	1.79	1.47
6/11/2015	4800	1.78	1.44
6/12/2015	4840	1.79	1.44
6/13/2015	4869	1.80	1.44
6/14/2015	4653	1.80	1.40
6/15/2015	5311	1.79	1.40
6/16/2015	5184	1.78	1.38
6/17/2015	3375	1.79	1.42
6/18/2015	5363	1.79	1.41
6/19/2015	5194	1.78	1.44
6/20/2015	2792	1.76	1.47
6/21/2015	4241	1.75	1.46
6/22/2015	5210	1.74	1.44
6/23/2015	4482	1.73	1.45
6/24/2015	4950	1.72	1.44
6/25/2015	5282	1.71	1.43
6/26/2015	5220	1.71	1.43
6/27/2015	5412	1.70	1.46
6/28/2015	4703	1.70	1.49
6/29/2015	4902	1.71	1.46

6/30/2015	4721	1.71	1.43

NOTES:

A.The first twenty-nine 30-day rolling averages reported on this spreadsheet were calculated from data found on another spreadsheet. Commencing with day thirty, the 30-day rolling averages are calculated on this spreadsheet.

B.Negative numbers for total pounds of pollutant per day are read as a zero (0) when calculating the 30-day rolling average. Negative numbers were validated and

C. Dates listed above respresent all days with Kiln Operation as defined by the Consent Decree.

ATTACHMENT B

LOGANSPORT KILN 1

FACILITY	LOGASNPORT	NOX Limit	SO2 Limit
KILN	1	7.00	3.50
DATE	CLINKER PRODUCTION	NOX 30DRA	SO2 30DRA
	TON/DAY	LB/TON-CK	LB/TON-CK
1/1/2015	43	5.72	1.72
1/2/2015	177	5.58	1.64
1/3/2015	207	5.61	1.70
1/4/2015	594	5.65	1.80
1/5/2015	660	5.52	1.83
1/6/2015	667	5.52	1.83
1/7/2015	612	5.49	1.79
1/8/2015	595	5.52	1.84
1/9/2015	574	5.62	1.86
1/10/2015	596	5.69	1.82
1/11/2015	526	5.76	1.83
1/12/2015	527	5.83	1.83
1/13/2015	542	5.89	1.82
1/14/2015	614	5.91	1.79
1/15/2015	681	5.96	1.77
1/16/2015	669	6.02	1.60
1/17/2015	144	6.09	1.55
1/18/2015	252	6.08	1.55
1/19/2015	599	6.19	1.51
1/20/2015	579	6.31	1.57
1/21/2015	502	6.34	1.67
1/22/2015	535	6.31	1.69
1/23/2015	593	6.51	1.65
1/24/2015	591	6.58	1.63
1/25/2015	295	6.76	1.72
1/26/2015	537	6.97	1.78
1/27/2015	595	7.28	1.88
1/28/2015	646	7.35	1.90
1/29/2015	629	7.48	1.84
1/30/2015	616	7.52	1.83
1/31/2015	500	7.44	1.76
2/1/2015	647	7.58	1.74
2/2/2015	656	7.51	1.64
2/3/2015	662	7.50	1.51
2/4/2015	741	7.73	1.43
2/5/2015	368	7.72	1.44
2/6/2015	377	7.66	1.37
2/7/2015	574	7.67	1.27
2/8/2015	635	7.66	1.22
2/9/2015	595	7.58	1.19
2/10/2015	612	7.41	1.16
2/11/2015	624	7.27	1.08

2/12/2015	548	7.14	1.00
2/13/2015	549	7.07	0.93
2/14/2015	478	6.91	0.88
2/15/2015	615	6.72	0.84
2/16/2015	457	6.60	0.81
2/17/2015	505	6.56	0.78
2/18/2015	670	6.53	0.73
2/19/2015	450	6.47	0.64
2/20/2015	584	6.35	0.53
2/21/2015	595	6.26	0.50
2/22/2015	625	6.06	0.48
2/23/2015	632	5.95	0.44
2/24/2015	605	5.86	0.39
2/25/2015	637	5.82	0.36
2/26/2015	627	5.59	0.29
2/28/2015	565	5.49	0.28
3/1/2015	471	5.30	0.27
3/2/2015	515	5.13	0.28
3/3/2015	513	4.98	0.28
3/4/2015	521	4.75	0.26
3/5/2015	495	4.66	0.22
3/27/2015	443	4.61	0.20
3/28/2015	467	4.31	0.20
3/29/2015	183	4.31	0.19
3/30/2015	327	4.39	0.18
3/31/2015	407	4.36	0.17
4/1/2015	569	4.49	0.18
4/2/2015	595	4.66	0.22
4/3/2015	543	4.95	0.17
4/4/2015	348	5.17	0.15
4/5/2015	518	5.36	0.15
4/6/2015	634	5.41	0.14
4/7/2015	616	5.59	0.15
4/8/2015	606	5.81	0.20
4/9/2015	632	5.87	0.21
4/10/2015	617	6.06	0.22
4/11/2015	572	6.18	0.27
4/12/2015	619	6.23	0.29
4/13/2015	608	6.40	0.34
4/14/2015	496	6.44	0.35
4/15/2015	552	6.56	0.35
4/16/2015	184	6.57	0.36
4/17/2015	77	6.70	0.37
4/18/2015	463	6.81	0.39
4/19/2015	580	7.00	0.43
4/20/2015	603	7.21	0.43
4/21/2015	445	7.13	0.43

4/22/2015	14	7.14	0.43
4/23/2015	193	7.18	0.44
4/24/2015	483	7.23	0.45
4/25/2015	470	7.14	0.45
4/26/2015	398	7.08	0.43
4/27/2015	461	7.07	0.47
4/28/2015	519	7.11	0.47
4/29/2015	580	7.07	0.50
4/30/2015	632	7.28	0.52
5/1/2015	562	7.15	0.52
5/2/2015	613	7.06	0.48
5/3/2015	246	7.04	0.48
5/4/2015	423	7.04	0.52
5/5/2015	532	7.03	0.54
5/6/2015	526	7.06	0.57
5/7/2015	521	7.02	0.61
5/8/2015	526	6.96	0.61
5/9/2015	528	6.91	0.64
5/10/2015	531	6.76	0.65
5/11/2015	534	6.63	0.64
5/12/2015	538	6.71	0.63
5/13/2015	541	6.78	0.64
5/14/2015	461	6.85	0.70
5/15/2015	440	6.85	0.70
5/16/2015	419	6.79	0.68
5/17/2015	451	6.71	0.66
5/18/2015	422	6.61	0.64
5/19/2015	463	6.49	0.60
5/20/2015	345	6.40	0.58
5/21/2015	170	6.51	0.58
5/22/2015	500	6.45	0.57
5/23/2015	403	6.37	0.56
5/24/2015	625	6.30	0.55
5/25/2015	446	6.36	0.53
5/26/2015	328	6.40	0.53
5/27/2015	584	6.37	0.49
5/28/2015	539	6.37	0.50
5/29/2015	525	6.33	0.47
5/30/2015	480	6.08	0.45
5/31/2015	62	6.02	0.45
6/1/2015	310	6.01	0.48
6/2/2015	549	5.88	0.49
6/4/2015	599	5.73	0.46
6/5/2015	518	5.56	0.44
6/6/2015	79	5.44	0.44
6/7/2015	470	5.34	0.40
6/8/2015	559	5.27	0.36

6/9/2015	565	5.27	0.32
6/10/2015	557	5.24	0.35
6/11/2015	565	5.25	0.32
6/12/2015	553	5.14	0.35
6/13/2015	560	5.07	0.31
6/14/2015	443	4.89	0.23
6/15/2015	497	4.73	0.23
6/16/2015	477	4.75	0.24
6/17/2015	503	4.74	0.24
6/18/2015	493	4.66	0.24
6/19/2015	376	4.55	0.24
6/20/2015	369	4.36	0.25
6/21/2015	527	4.16	0.25
6/22/2015	519	4.03	0.25
6/23/2015	474	3.97	0.25
6/24/2015	456	3.91	0.25
6/25/2015	463	3.76	0.26
6/26/2015	335	3.67	0.26
6/27/2015	114	3.72	0.26
6/30/2015	522	3.69	0.26

NOTES:

A.The first twenty-nine 30-day rolling averages reported on this spreadsheet were calculated from data found on another spreadsheet. Commencing with day thirty, the 30-day rolling averages are calculated on this spreadsheet.
B.Negative numbers for total pounds of pollutant per day are read as a zero (0) when calculating the 30-day rolling average. Negative numbers were validated and represent precision/accuracy limitations of the CEMS at extremely low
D. Dates listed above respresent all days with Kiln Operation as defined by the Consent Decree.

NOTES:

ATTACHMENT C

LOGANSPORT KILN 2

FACILITY	LOGASNPORT	NOX Limit	SO2 Limit
KILN	2	7.00	4.80
DATE	CLINKER PRODUCTION	NOX 30DRA	SO2 30DRA
	TON/DAY	LB/TON-CK	LB/TON-CK
1/1/2015	186	4.69	1.46
1/2/2015	391	4.60	1.25
1/3/2015	428	5.14	2.00
1/4/2015	456	5.50	2.77
1/5/2015	438	5.28	2.54
1/6/2015	440	5.28	2.38
1/8/2015	354	5.25	2.38
1/9/2015	430	5.22	2.19
1/10/2015	334	5.14	1.97
1/11/2015	25	5.36	2.17
1/12/2015	348	5.45	2.46
1/13/2015	422	5.62	3.00
1/14/2015	439	5.84	3.44
1/15/2015	420	5.93	3.86
1/16/2015	385	6.04	4.28
1/17/2015	376	6.18	4.62
1/18/2015	385	6.26	4.69
1/19/2015	322	6.28	4.76
1/20/2015	321	6.18	4.67
3/4/2015	345	6.16	4.65
3/5/2015	368	6.08	4.46
3/6/2015	8	5.95	4.20
3/7/2015	401	5.99	3.99
3/8/2015	517	5.98	3.79
3/9/2015	508	5.92	3.62
3/10/2015	446	5.88	3.45
3/11/2015	406	5.84	3.29
3/12/2015	527	5.75	3.13
3/13/2015	529	5.68	2.99
3/14/2015	525	5.66	2.93
3/15/2015	545	5.60	2.80
3/16/2015	205	5.55	2.73
3/17/2015	206	5.51	2.55
3/18/2015	215	5.42	2.33
3/21/2015	87	5.56	2.35
3/22/2015	381	5.50	2.29
3/23/2015	529	5.41	2.19
3/24/2015	522	5.29	2.12
3/25/2015	412	5.25	2.09
3/26/2015	493	5.14	1.95
3/27/2015	437	5.08	1.77
3/28/2015	422	5.02	1.52

3/29/2015	389	5.11	1.29
3/30/2015	410	5.15	1.04
3/31/2015	430	5.11	0.77
4/1/2015	164	5.06	0.51
4/2/2015	220	5.03	0.36
4/3/2015	376	4.99	0.22
4/4/2015	309	4.98	0.16
4/5/2015	356	4.95	0.15
4/6/2015	358	4.92	0.12
4/7/2015	368	4.90	0.13
4/8/2015	388	4.80	0.13
4/9/2015	87	4.76	0.15
4/10/2015	334	4.75	0.14
4/11/2015	425	4.71	0.15
4/12/2015	446	4.68	0.21
4/13/2015	91	4.79	0.21
4/14/2015	130	4.83	0.21
4/15/2015	183	4.81	0.21
4/16/2015	265	4.83	0.21
4/17/2015	248	4.88	0.21
4/18/2015	269	4.88	0.22
4/19/2015	337	4.97	0.22
4/20/2015	370	4.96	0.22
4/21/2015	134	5.01	0.23
4/22/2015	174	5.05	0.25
4/23/2015	317	5.11	0.25
4/24/2015	137	5.09	0.25
4/25/2015	231	5.13	0.26
4/26/2015	354	5.10	0.27
4/27/2015	435	5.10	0.27
4/29/2015	379	4.95	0.28
4/30/2015	364	4.79	0.30
5/1/2015	347	4.65	0.32
5/2/2015	359	4.54	0.32
5/3/2015	355	4.42	0.32
5/4/2015	345	4.31	0.34
5/5/2015	357	4.26	0.35
5/6/2015	106	4.19	0.38
5/7/2015	235	4.15	0.41
5/8/2015	397	4.12	0.42
5/9/2015	112	4.12	0.41
5/10/2015	166	4.10	0.39
5/11/2015	317	4.06	0.39
5/12/2015	384	4.04	0.40
5/13/2015	395	3.96	0.36
5/14/2015	367	3.78	0.35
5/15/2015	273	3.64	0.36

5/16/2015	327	3.55	0.40
5/17/2015	331	3.45	0.42
5/18/2015	358	3.37	0.44
5/19/2015	134	3.27	0.43
5/20/2015	129	3.08	0.44
5/22/2015	351	2.94	0.45
5/23/2015	298	2.83	0.44
5/24/2015	200	2.77	0.43
5/25/2015	395	2.72	0.43
5/26/2015	420	2.66	0.47
5/27/2015	406	2.51	0.48
5/28/2015	208	2.48	0.49
5/29/2015	310	2.50	0.55
5/30/2015	416	2.53	0.55
5/31/2015	323	2.62	0.53
6/1/2015	374	2.70	0.50
6/2/2015	390	2.80	0.50
6/3/2015	395	2.89	0.51
6/4/2015	410	3.01	0.49
6/5/2015	382	3.10	0.48
6/6/2015	138	3.18	0.45
6/7/2015	228	3.25	0.42
6/8/2015	349	3.27	0.42
6/9/2015	389	3.25	0.41
6/10/2015	390	3.25	0.41
6/11/2015	378	3.22	0.41
6/13/2015	83	3.25	0.39
6/14/2015	169	3.25	0.38
6/15/2015	488	3.23	0.36
6/16/2015	63	3.24	0.35
6/17/2015	105	3.20	0.36
6/18/2015	378	3.16	0.35
6/19/2015	384	3.14	0.34
6/20/2015	400	3.14	0.33
6/21/2015	431	3.10	0.32
6/22/2015	465	3.09	0.32
6/24/2015	450	3.08	0.33
6/25/2015	456	3.10	0.27
6/26/2015	464	3.14	0.25
6/27/2015	464	3.10	0.25
6/28/2015	316	3.06	0.16
6/29/2015	4	3.01	0.15
6/30/2015	283	2.91	0.15

NOTES:

A.The first twenty-nine 30-day rolling averages reported on this spreadsheet were

calculated from data found on another spreadsheet. Commencing with day thirty, the 30-day rolling averages are calculated on this spreadsheet.
B.Negative numbers for total pounds of pollutant per day are read as a zero (0) when calculating the 30-day rolling average. Negative numbers were validated and represent precision/accuracy limitations of the CEMS at extremely low concentrations.

C. SO2 limit is applicable Dec.31.2014; Data collected from this data will be summed to the 30 day rolling average value as defined in the Consent Order.
D. Dates listed above respresent all days with Kiln Operation as defined by the Consent Decree.

ATTACHMENT D

SPEED KILN 1

FACILITY	SPEED K1	NOX Limit	SO2 Limit
KILN	2.00	**3.50**	**1.00**
DATE	NKER PRODUCTI	NOX 30DRA	SO2 30DRA
	TON/DAY	LB/TON-CK	LB/TON-CK
5/21/2015	0	NA	NA
5/22/2015	0	NA	NA
5/23/2015	672	NA	NA
5/24/2015	661	NA	NA
5/25/2015	571	NA	NA
5/26/2015	815	NA	NA
5/27/2015	873	NA	NA
5/28/2015	581	NA	NA
5/29/2015	550	NA	NA
5/30/2015	713	NA	NA
5/31/2015	534	NA	NA
6/1/2015	595	NA	NA
6/2/2015	606	NA	NA
6/3/2015	619	NA	NA
6/4/2015	675	NA	NA
6/5/2015	633	NA	NA
6/6/2015	656	NA	NA
6/7/2015	659	NA	NA
6/8/2015	648	NA	NA
6/9/2015	658	NA	NA
6/10/2015	754	NA	NA
6/11/2015	664	NA	NA
6/12/2015	626	NA	NA
6/13/2015	606	NA	NA
6/14/2015	598	NA	NA
6/15/2015	601	NA	NA
6/16/2015	666	NA	NA
6/17/2015	510	NA	NA
6/18/2015	547	NA	NA
6/19/2015	216	3.25	0.91
6/20/2015	11	3.27	0.91
6/21/2015	714	3.27	0.89
6/22/2015	751	3.31	0.74
6/23/2015	875	3.27	0.76
6/24/2015	907	3.27	0.78
6/25/2015	896	3.27	0.79
6/26/2015	655	3.24	0.84
6/27/2015	600	3.23	0.91
6/28/2015	833	3.19	0.87
6/29/2015	907	3.16	0.82
6/30/2015	382	3.15	0.81

NOTES:

A.The first twenty-nine 30-day rolling averages reported on this spreadsheet were calculated from data found on another spreadsheet. Commencing with day thirty, the 30-day rolling

B.Negative numbers for total pounds of pollutant per day are read as a zero (0) when calculating the 30-day rolling average. Negative numbers were validated and represent precision/accuracy

C. Dates listed above respresent all days with Kiln Operation as defined by the Consent Decree.

D. Speed's kiln 1 did not operate during this period.

ATTACHMENT E

SPEED KILN 2

FACILITY	SPEED K2	NOX Limit	SO2 Limit
KILN	2.00	2.10	1.70
DATE	CLINKER PRODUCTION TON/DAY	NOX 30DRA LB/TON-CK	SO2 30DRA LB/TON-CK
1/1/2015	1905	1.73	1.33
1/2/2015	1779	1.73	1.38
1/3/2015	1756	1.73	1.46
1/4/2015	1789	1.75	1.27
1/5/2015	1591	1.77	1.15
1/6/2015	1663	1.76	1.08
1/7/2015	1755	1.78	1.08
1/8/2015	1446	1.76	1.1
1/9/2015	1927	1.77	1.04
1/10/2015	1861	1.76	1.04
1/11/2015	1610	1.76	1.08
1/12/2015	1891	1.76	1.07
1/13/2015	1827	1.76	1.06
1/14/2015	1859	1.76	1.08
1/15/2015	548	1.76	1.06
1/18/2015	1585	1.76	1.09
1/19/2015	1111	1.76	1.14
1/20/2015	591	1.77	1.13
1/21/2015	2059	1.74	1.16
1/22/2015	1953	1.7	1.17
1/23/2015	1706	1.68	1.16
1/24/2015	1971	1.66	1.14
1/25/2015	1960	1.64	1.13
1/26/2015	1907	1.61	1.12
1/27/2015	595	1.6	1.12
1/28/2015	1841	1.58	1.11
1/29/2015	1917	1.58	1.12
1/30/2015	2132	1.59	1.15
1/31/2015	2227	1.6	1.16
2/1/2015	2232	1.6	1.19
2/2/2015	2162	1.6	1.2
2/3/2015	2229	1.6	1.25
2/4/2015	2238	1.6	1.33
2/5/2015	2240	1.6	1.35
2/6/2015	2199	1.6	1.36
2/7/2015	2242	1.6	1.38
2/8/2015	2240	1.6	1.36
2/9/2015	2249	1.6	1.34
2/10/2015	2176	1.6	1.36
2/11/2015	2199	1.6	1.35
2/12/2015	2171	1.6	1.35
2/13/2015	2224	1.6	1.34

2/14/2015	2027	1.6	1.36
2/15/2015	831	1.61	1.36
2/16/2015	650	1.61	1.36
2/17/2015	1925	1.6	1.35
2/18/2015	1717	1.6	1.32
2/19/2015	967	1.61	1.33
2/20/2015	146	1.61	1.32
2/21/2015	858	1.64	1.32
2/22/2015	220	1.65	1.33
2/23/2015	1321	1.68	1.36
2/24/2015	1615	1.7	1.36
2/25/2015	1240	1.75	1.37
2/26/2015	1470	1.75	1.36
2/27/2015	1508	1.77	1.36
2/28/2015	508	1.77	1.35
3/22/2015	0	1.77	1.33
3/23/2015	80	1.78	1.33
3/24/2015	1801	1.77	1.32
3/25/2015	1946	1.77	1.33
3/26/2015	2055	1.77	1.28
3/27/2015	1767	1.78	1.24
3/28/2015	2276	1.78	1.24
3/29/2015	2274	1.78	1.31
3/30/2015	2275	1.78	1.31
3/31/2015	2276	1.78	1.33
4/1/2015	2275	1.95	1.48
4/2/2015	2264	1.95	1.48
4/3/2015	1689	1.96	1.5
4/4/2015	1943	1.97	1.49
4/5/2015	2276	1.96	1.48
4/6/2015	2260	1.89	1.43
4/7/2015	2251	1.88	1.42
4/8/2015	2202	1.93	1.42
4/9/2015	2269	1.92	1.39
4/10/2015	1463	1.9	1.38
4/11/2015	973	1.85	1.34
4/12/2015	2150	1.85	1.32
4/13/2015	2235	1.67	1.22
4/14/2015	2127	1.65	1.23
4/15/2015	2167	1.69	1.27
4/16/2015	2264	1.7	1.3
4/17/2015	2251	1.7	1.34
4/18/2015	2245	1.73	1.36
4/19/2015	2058	1.73	1.4
4/20/2015	902	1.73	1.41
4/21/2015	0	1.73	1.41
4/22/2015	1312	1.73	1.39

4/23/2015	2274	1.73	1.38
4/24/2015	2267	1.73	1.38
4/25/2015	2210	1.72	1.39
4/26/2015	2274	1.72	1.41
4/27/2015	2145	1.71	1.42
4/28/2015	2203	1.7	1.38
4/29/2015	2257	1.7	1.41
4/30/2015	2276	1.69	1.45
5/1/2015	2230	1.64	1.41
5/2/2015	2257	1.64	1.42
5/3/2015	2270	1.63	1.44
5/4/2015	2276	1.63	1.44
5/5/2015	1626	1.63	1.48
5/6/2015	2209	1.62	1.5
5/7/2015	2300	1.62	1.49
5/8/2015	2312	1.61	1.52
5/9/2015	2300	1.6	1.52
5/10/2015	2313	1.59	1.52
5/11/2015	2275	1.59	1.53
5/12/2015	2310	1.6	1.55
5/13/2015	2288	1.61	1.58
5/14/2015	2300	1.61	1.55
5/15/2015	1469	1.61	1.56
5/16/2015	743	1.61	1.56
5/17/2015	2104	1.61	1.53
5/18/2015	2291	1.61	1.53
5/19/2015	2181	1.61	1.5
5/20/2015	2140	1.6	1.5
5/21/2015	2270	1.61	1.52
5/22/2015	2271	1.6	1.55
5/23/2015	2265	1.6	1.56
5/24/2015	2081	1.6	1.55
5/25/2015	1787	1.6	1.54
5/26/2015	2246	1.6	1.47
5/27/2015	2118	1.59	1.46
5/28/2015	2180	1.59	1.47
5/29/2015	2180	1.56	1.47
5/30/2015	2121	1.55	1.41
5/31/2015	1714	1.55	1.42
6/1/2015	2206	1.55	1.46
6/2/2015	2248	1.55	1.47
6/3/2015	2273	1.55	1.54
6/4/2015	2283	1.54	1.52
6/5/2015	2255	1.54	1.52
6/6/2015	1697	1.54	1.53
6/7/2015	2297	1.53	1.53
6/8/2015	2235	1.53	1.53

6/9/2015	2283	1.52	1.54
6/10/2015	2122	1.51	1.54
6/11/2015	2127	1.5	1.53
6/12/2015	1451	1.49	1.51
6/13/2015	1	1.49	1.54
6/14/2015	1021	1.5	1.53
6/15/2015	911	1.5	1.53
6/16/2015	1884	1.49	1.54
6/17/2015	1264	1.49	1.54
6/18/2015	1887	1.49	1.55
6/19/2015	2087	1.48	1.54
6/20/2015	761	1.48	1.52
6/21/2015	0	1.47	1.5
6/22/2015	1483	1.47	1.49
6/23/2015	2310	1.5	1.51
6/24/2015	2277	1.51	1.54
6/25/2015	2147	1.52	1.56
6/26/2015	1224	1.53	1.58
6/27/2015	1531	1.52	1.57
6/28/2015	2243	1.57	1.55
6/29/2015	1855	1.6	1.59
6/30/2015	650	1.6	1.59

NOTES:

A.The first twenty-nine 30-day rolling averages reported on this spreadsheet were calculated from data found on another spreadsheet. Commencing with day thirty, the 30-day rolling averages are calculated on

B.Negative numbers for total pounds of pollutant per day are read as a zero (0) when calculating the 30-day rolling average. Negative numbers were validated and represent precision/accuracy limitations of the CEMS at

C. Dates listed above respresent all days with Kiln Operation as defined by the Consent Decree.

D. Speed's kiln 1 did not operate during this period.

ATTACHMENT F

NAZARETH KILN 1

FACILITY	NAZARETH	NOX Limit	SO2 Limit
KILN	1	2.30	1.80
DATE	CLINKER PRODUCTION	NOX 30DRA	SO2 30DRA
	TON/DAY	LB/TON-CK	LB/TON-CK
1/1/15	4481.23	2.04	0.80
1/2/15	4684.20	2.05	0.79
1/3/15	4181.08	2.05	0.78
1/4/15	4208.13	2.05	0.76
1/5/15	113.99	2.06	0.76
1/6/15	3377.01	2.07	0.78
1/7/15	3994.34	2.07	0.79
1/8/15	4344.42	2.07	0.79
1/9/15	2988.28	2.08	0.80
1/10/15	2451.49	2.08	0.82
1/11/15	4558.22	2.07	0.82
1/12/15	4444.90	2.06	0.84
1/13/15	4327.99	2.06	0.88
1/14/15	4499.70	2.07	0.92
1/15/15	2760.88	2.07	0.93
1/16/15	3785.87	2.07	0.93
1/17/15	3822.22	2.06	0.93
1/18/15	4218.68	2.06	0.94
1/19/15	4181.96	2.06	0.98
1/20/15	3944.86	2.06	1.00
1/21/15	2727.78	2.06	1.02
1/22/15	4086.76	2.07	1.03
1/23/15	3723.29	2.06	1.04
1/24/15	4027.51	2.06	1.04
1/25/15	3278.56	2.06	1.05
2/19/15	7.38	2.07	1.08
2/20/15	4.37	2.08	1.11
2/21/15	20.53	2.09	1.16
2/22/15	0.00	2.09	1.19
2/23/15	1300.73	2.09	1.24
2/24/15	2538.24	2.09	1.27
2/25/15	3572.98	2.09	1.26
2/26/15	3409.89	2.08	1.32
2/27/15	3016.11	2.07	1.33
2/28/15	4114.93	2.05	1.31
3/1/15	4573.41	2.05	1.30
3/2/15	4569.38	2.04	1.29
3/3/15	4302.13	2.05	1.25
3/4/15	4226.72	2.04	1.22
3/5/15	1365.99	2.04	1.20
3/6/15	798.74	2.05	1.19
3/7/15	0.00	2.08	1.20

3/8/15	580.52	2.09	1.21
3/9/15	3082.85	2.09	1.20
3/10/15	3134.07	2.08	1.22
3/11/15	3686.15	2.09	1.26
3/12/15	3376.80	2.10	1.28
3/13/15	4137.14	2.10	1.30
3/14/15	4122.67	2.09	1.31
3/15/15	4292.91	2.06	1.32
3/16/15	3247.75	2.04	1.35
3/17/15	4235.69	2.04	1.38
3/18/15	4413.19	2.03	1.39
3/19/15	2704.14	2.04	1.42
3/20/15	4322.33	2.04	1.43
3/21/15	4304.97	2.03	1.45
3/22/15	2881.99	2.03	1.41
3/23/15	3948.89	2.02	1.33
3/24/15	3776.43	2.03	1.31
3/25/15	3276.19	2.04	1.28
3/26/15	3510.44	2.05	1.27
3/27/15	3858.76	2.05	1.26
3/28/15	3625.57	2.06	1.22
3/29/15	4063.21	2.07	1.20
3/30/15	4100.13	2.07	1.18
3/31/15	4211.42	2.07	1.17
4/1/15	3665.31	2.06	1.16
4/2/15	3565.19	2.06	1.19
4/3/15	3707.84	2.06	1.19
4/4/15	4089.66	2.04	1.17
4/5/15	3995.52	2.03	1.16
4/6/15	4222.10	2.02	1.13
4/7/15	4222.01	2.00	1.12
4/8/15	4128.62	2.00	1.09
4/9/15	4126.91	2.00	1.08
4/10/15	4390.59	2.00	1.06
4/11/15	4357.96	2.00	1.03
4/12/15	4394.27	2.02	0.99
4/13/15	3832.22	2.03	0.96
4/14/15	3571.40	2.07	0.93
4/15/15	919.88	2.08	0.89
4/17/15	17.75	2.09	0.87
4/18/15	2729.31	2.13	0.83
4/19/15	4329.16	2.13	0.77
4/20/15	2889.60	2.14	0.73
4/21/15	4284.99	2.14	0.67
4/22/15	4441.70	2.13	0.65
4/23/15	4508.11	2.13	0.65
4/24/15	4376.88	2.12	0.63

4/25/15	4311.96	2.12	0.61
4/26/15	4335.24	2.11	0.60
4/27/15	4485.67	2.11	0.58
4/28/15	3939.75	2.11	0.57
4/29/15	4484.12	2.11	0.54
4/30/15	4308.93	2.12	0.53
5/1/15	3587.09	2.12	0.51
5/2/15	4065.06	2.13	0.49
5/3/15	3799.62	2.14	0.47
5/4/15	4558.79	2.14	0.47
5/5/15	4757.17	2.14	0.48
5/6/15	4583.34	2.14	0.47
5/7/15	4430.69	2.14	0.47
5/8/15	4328.94	2.14	0.45
5/9/15	4401.82	2.14	0.45
5/10/15	4499.03	2.15	0.44
5/11/15	4519.73	2.15	0.42
5/12/15	4499.63	2.14	0.41
5/13/15	634.93	2.13	0.40
5/14/15	369.67	2.14	0.41
5/15/15	1448.61	2.13	0.40
5/17/15	0.00	2.13	0.39
5/18/15	1994.27	2.13	0.39
5/19/15	4456.20	2.11	0.39
5/20/15	4236.94	2.11	0.40
5/21/15	4313.88	2.11	0.41
5/22/15	3780.81	2.12	0.42
5/23/15	4165.11	2.11	0.42
5/24/15	4036.95	2.12	0.44
5/25/15	4137.02	2.12	0.45
5/26/15	3835.42	2.14	0.48
5/27/15	4204.50	2.13	0.49
5/28/15	415.76	2.13	0.50
5/29/15	778.03	2.15	0.51
5/30/15	4647.30	2.14	0.53
5/31/15	4638.51	2.13	0.54
6/1/15	4272.28	2.13	0.55
6/2/15	3233.73	2.13	0.56
6/3/15	4511.08	2.13	0.55
6/4/15	4664.70	2.12	0.55
6/5/15	4508.75	2.12	0.54
6/6/15	3851.60	2.12	0.55
6/7/15	4536.14	2.12	0.55
6/8/15	4696.32	2.12	0.55
6/9/15	1488.40	2.15	0.59
6/10/15	2888.80	2.15	0.61
6/11/15	844.96	2.16	0.62

6/13/15	790.07	2.17	0.64
6/14/15	3432.79	2.16	0.62
6/15/15	3083.60	2.14	0.61
6/16/15	3260.24	2.14	0.63
6/17/15	2787.43	2.13	0.63
6/18/15	137.89	2.12	0.63
6/19/15	3671.47	2.12	0.63
6/20/15	3615.43	2.11	0.62
6/21/15	4195.06	2.11	0.63
6/22/15	4176.88	2.10	0.65
6/23/15	4179.50	2.10	0.65
6/24/15	4187.59	2.10	0.63
6/25/15	4373.36	2.09	0.61
6/26/15	3582.01	2.08	0.58
6/27/15	4352.01	2.09	0.56
6/28/15	4239.04	2.10	0.55
6/29/15	4075.03	2.08	0.52
6/30/15	3712.82	2.09	0.52

NOTES:

A.The first twenty-nine 30-day rolling averages reported on this spreadsheet were calculated from data found on another spreadsheet. Commencing with day thirty, the 30-day rolling averages are calculated

B.Negative numbers for total pounds of pollutant per day are read as a zero (0) when calculating the 30-day rolling average. Negative numbers were validated and represent precision/accuracy limitations of the

C. SO2 limit is applicable Dec.31.2014; Data collected from this data will be summed to the 30 day rolling average value as defined in the

D. Dates listed above respresent all days with Kiln Operation as defined by the Consent Decree.

ATTACHMENT G

SAN JUAN KILN 3

FACILITY	SAN JUAN			NOX Limit	SO2 Limit
KILN	3			2.30	1.00
DATE	CLINKER PRODUCTION	NOX RATE	SO2 RATE	NOX 30DRA	SO2 30DRA
	TON/DAY	LB/DAY	LB/DAY	LB/TON-CK	LB/TON-CK
2/9/2015	0	1047.09	693.51	2.47	0.51
2/10/2015	0	86.13	155.67	2.47	0.51
2/11/2015	1190	928.89	232.53	2.43	0.51
2/12/2015	2671	2784.80	309.50	2.35	0.49
2/13/2015	1161	714.24	227.38	2.30	0.47
2/14/2015	2657	2474.98	618.62	2.22	0.44
2/15/2015	3093	3190.70	443.00	2.13	0.41
2/16/2015	2919	3151.90	311.50	2.06	0.38
2/17/2015	3136	3297.90	379.40	1.99	0.37
2/18/2015	2686	3066.00	375.60	1.91	0.33
2/19/2015	2948	3049.20	514.70	1.84	0.31
2/20/2015	2991	3652.11	1430.60	1.80	0.32
2/21/2015	3281	3766.40	1019.70	1.72	0.29
2/22/2015	2222	1965.64	360.87	1.69	0.28
2/23/2015	1902	1807.74	594.16	1.66	0.28
2/24/2015	553	468.19	283.61	1.64	0.29
2/25/2015	1656	2559.05	1089.00	1.60	0.30
2/26/2015	436	219.52	129.36	1.54	0.31
4/7/2015	0	35.40	41.70	1.50	0.32
4/8/2015	0	26.40	110.82	1.47	0.32
4/9/2015	444	322.90	575.51	1.43	0.33
4/10/2015	1395	2676.40	389.10	1.42	0.34
4/11/2015	1589	3035.56	325.86	1.41	0.32
4/12/2015	1750	3079.80	618.60	1.41	0.31
4/13/2015	1790	4025.30	1076.50	1.42	0.30
4/14/2015	1822	3342.00	542.10	1.40	0.30
4/15/2015	1630	3177.04	671.29	1.38	0.30
4/16/2015	1036	1812.34	283.57	1.34	0.30
4/17/2015	1112	1622.86	436.04	1.28	0.30
4/18/2015	1736	3781.40	535.20	1.31	0.30
4/19/2015	1592	3422.20	515.50	1.31	0.28
4/20/2015	1615	3333.60	559.00	1.34	0.28
4/21/2015	1097	2373.63	228.64	1.37	0.28
4/22/2015	1287	2589.70	279.40	1.40	0.29
4/23/2015	1264	2170.48	350.82	1.42	0.29
4/24/2015	1378	2778.30	379.80	1.47	0.29
4/25/2015	1310	2539.40	324.60	1.51	0.30
4/26/2015	1569	3699.00	1294.20	1.56	0.33
4/27/2015	663	766.08	281.78	1.59	0.35
4/28/2015	617	454.32	168.23	1.61	0.36
4/29/2015	1234	2039.46	755.86	1.65	0.38
4/30/2015	777	1528.83	128.22	1.69	0.37

6/4/2015	0	10.54	45.56	1.74	0.38
6/5/2015	0	91.40	155.45	1.80	0.40
6/6/2015	0	4.83	31.53	1.85	0.40
6/7/2015	101	41.68	76.21	1.86	0.40
6/8/2015	0	181.14	167.52	1.89	0.39
6/9/2015	1115	1662.56	355.92	1.89	0.39
6/10/2015	1572	2747.24	340.33	1.88	0.38
6/11/2015	253	95.04	48.85	1.87	0.38
6/12/2015	886	1158.34	214.81	1.87	0.36
6/13/2015	655	758.34	145.70	1.85	0.36
6/14/2015	982	1230.99	292.38	1.83	0.37
6/15/2015	1351	2097.50	350.60	1.82	0.36
6/16/2015	1128	1714.39	235.03	1.79	0.34
6/17/2015	473	550.83	179.80	1.77	0.35
6/18/2015	48	6.76	15.56	1.76	0.34
6/20/2015	49	13.57	28.44	1.76	0.34
6/21/2015	623	586.66	279.39	1.75	0.35
6/22/2015	337	170.94	84.02	1.70	0.35
6/23/2015	482	585.22	278.52	1.66	0.35
6/24/2015	445	456.23	48.83	1.62	0.35
6/29/2015	72	167.34	82.07	1.59	0.36
6/30/2015	987	1618.52	162.73	1.57	0.36

NOTES:

A. Commencing with day thirty, the 30-day rolling averages are calculated on this spreadsheet.

B. The zero values recorded are validated and represent the limits of detection and time of operation of the equipment.

C. Limits where applicable on December 31, 2013; at this time data was collected to meet the definition of the 30 Day Rolling Average.

D. Dates listed above respresent all days with Kiln Operation as defined by the Consent Decree.